Help Desk / Support Details

Swann Technical Support
All Countries E-mail: tech@swann.com.au
Telephone Helpdesk
UNITED STATES toll free
877-274-3695
(Sun-Thurs, 2pm-10.30pm PST)
800-627-2799
(Mon-Fri, 9am-1pm PST)
USA Exchange & Repairs
562-777-2551
(Mon-Fri, 9am-5pm PST)
AUSTRALIA toll free
1300 13 8324
(Mon-Fri, 9am-5.30pm Aus EST)
International
+61 3 8412 4610
(Mon-Fri, 9am-5.30pm Aus EST)

See http://www.worldtimeserver.com for information on different time zones and the time in Melbourne Australia compared to your local time.

Warranty Information

Swann Communications warrants this product against defects in workmanship and material for a period of one (1) year from it's original purchase date. You must present your receipt as proof of date of purchase for warranty validation. Any unit which proves defective during the stated period will be repaired without charge for parts or labour or replaced at the sole discretion of Swann. The repair or replacement will be warranted for either ninety days or the remainder of the original one year warranty period, whichever is longer. The end user is responsible for all freight charges incurred to send the product to Swann's repair centres. The end user is responsible for all shipping costs incurred when shipping from and to any country other than the country of origin. The warranty does not cover any incidental, accidental or consequential damages arising from the use of or the inability to use this product. Any costs associated with the fitting or removal of this product by a tradesman or other person or any other costs associated with its use are the responsibility of the end user. This warranty applies to the original purchaser of the product only and is not transferrable to any third party.

Unauthorised end user or third party modifications to any component or evidence of misuse or abuse of the device will render all warranties void.

www.swannsecurity.com

English

Night Hawk Camera Pack

3 Wireless Outdoor Cameras & Receiver

Quality Surveillance with Night Vision & Audio for your home or business

If this device does not work when you first plug it in, do not take it back to the store.

- Contact the Swann Helpdesk using our fast e-mail service **tech@swann.com.au** or call us on one of the Toll-Free numbers shown on the back cover of this booklet.
- Most problems can be quickly and easily fixed with a simple e-mail or a quick chat with one of our friendly technical staff. (Toll-Free available in the US and Australia only)

Note: Wireless Networks (WiFi) may interfere with and/or experience interference caused by the transmitterin this unit. Changing the receiver to another channel/frequency or setting the Wireless Network (i.e. Wireless Access Point) to a frequency further away from the camera's set frequency can alleviate this problem. Consult the documentation of your Wireless LAN device for information on how to change the transmission frequency. These cameras work with most wireless camera receivers that support 2414MHz, 2432MHz,

Installation Guide

Contents

Introduction

The Swann Night Hawk Camera Pack incorporates the latest in advanced technology. We feel confident that you will be pleased with the quality and features of this product.

The Swann Night Hawk Camera Pack allows you to transmit pictures and sound with ease. As the radio waves it uses have a frequency of 2.4GHz, they can be received within a radius of up to 165ft/50m in open line of sight. The Night Hawk Camera Pack comes with 3 cameras so that you have the option of using different frequencies for different locations and conditions to ensure that you have the best possible image quality for your situation.

Please note: The Swann Night Hawk broadcasts video in the public domain. The video signal is not encrypted and could potentially be viewed by anyone with a similar 2.4GHz receiver unit. Please keep this in mind when positioning and using any wireless camera equipment.

This Package Comes With ...

- 3 x Night Hawk Color Cameras with built in 2.4GHz Transmitter with Stand
- 1 x Night Hawk 4 channel 2.4GHz Receiver
- 3 x Mains Power Adaptor (8V for use with Night Hawk Camera)
- 1 x Mains Power Adaptor (12V for use with Night Hawk Receiver)
- 3 x Battery Snap Adaptor (For use with Night Hawk Camera, 9V batteries not included)
- Remote Control for receiver
- RCA A/V Cable
- This Instruction Sheet

If any of these items are missing, please contact your retailer.

IMPORTANT: Due to the power consumption requirements of this product, we highly recommend the use of a 9 volt battery only for short term portable use.

FCC NOTICE
This device complies with Part 15 of FCC Rules.
Operation is subject to the following conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation

Technical Specifications

Night Hawk 2.4GHz Transmitter

Available Channels:	4 Channels in 2.4 Ghz frequency band*
RF Output Power:	FCC, CE and C-tick compliant
Antenna:	Omni-directional
Transmitting Range:	Up to 165ft ~ 50M line of sight
Dimensions H x W x L:	7/8" x 7/8" x 1" / 22 x 22 x 25mm
Weight:	3/4oz ~ 20 grams
Operating Temperature:	32° - 122°F (0° - 50°C)

Night Hawk 2.4GHz Receiver

Frequency:	4 Channels in 2.4 Ghz frequency band*
Video input/output:	1V p - p / 75 ohm
Audio input / output:	0.8V / 600 ohm
Antenna:	60 degree directional
Audio Bandwidth:	50 - 17000 Hz
Dimensions H x W x L:	6" x 3½" x 1 5/8" / 150 x 88 x 40mm

*The Night Hawk Camera Pack uses the following frequencies for the 4 channels:
Channel 1 (2414MHz), Channel 2 (2432MHz), Channel 3 (2450MHz) and Channel 4 (2468MHz).

Night Hawk CMOS Colour Camera

Sensor:	1/3"(8.5mm) Colour CMOS
Horizontal Resolution:	380 TV lines
Auto Electronic Exposure:	1/60 - 1/15000 sec.
Minimum Illumination:	1.5 Lux @ f1.2 LEDs inactive 0 Lux @ f1.2 LEDs active
Signal to Noise Ratio:	>48dB
Board Lens:	7/32" ~ 5.6mm
View Angle:	60 degrees
Size:	5/8 x 23/32" ~16mm x 18mm, board lens
Video System:	PAL 50Hz (Australia, UK/Europe), NTSC 60Hz (USA and Canada)

Automatic Exposure / Gain / White balance / IR LED activation

Troubleshooting, Hints and Tips

Poor Picture: Realign antennas until image quality improves, slightly adjust the position of the Night Hawk Camera or Receiver. Change the location of the Camera, or use a different Camera in the location experiencing interference that is on a different channel. In some cases interference may be caused by another device on a similar frequency to the channel you are using. Change to one of the other 4 available channels and check the signal quality again.

Lines only - no clear picture: Check to confirm there is no microwave oven or other 2.4GHz equipment operating close by ie; Cordless Telephones, Wireless Baby Monitors, Wireless LAN equipment etc. Make sure the Receiver is on the correct channel for the particular camera.

Picture ghosting or interference: Some home appliances such as Wireless LANs, 2.4GHz portable telephones and Microwave ovens operate on or near the 2.4GHz frequency. If you receive interference from such an appliance, try moving the Camera or Receiver to location further away from the appliance or in the event of interference from a Wireless LAN device, try changing the Wireless LAN to a different channel to improve the signal quality.

No picture: Check the receiver to confirm it is turned ON and make sure the A/V connection of the Receiver is not plugged into the Audio Out socket. Make sure the Receiver is on the correct channel. Check that the channel on the receiver is the set to the same as the camera you wish to view. Check to ensure the camera is plugged in and has power (cup your hands around the camera and you should see a faint red glow from the IR LEDs). You can use the infrared lighting facility to pick up a picture inside a dark environment. If your monitor does not display a picture in a dark environment, check the camera to be certain that infrared lighting is within range of the subject. Try to move the item within the 6-9ft (2-3m) range of the Cameras IR LEDs or place the Camera nearer to the object until a clear picture is displayed on the Monitor.

FCC Notice

We, Swann Communications of 10612 Shoemaker Avenue, Bldg A, Santa Fe Springs, CA 90670 USA, declare under our sole responsibility that the product:

SW233-WOC3

This product meets the requirements specified in Part 15 of FCC Regulation. Operation rests with the following two conditions:

(1) The equipment should not cause any harmful interference;

(2) The equipment must receive and process any interference, including any possible interference caused by operation mistakes. After testing the product, we confirm that it complies with the provision for class C digital equipment in the 15th part in FCC regulation; and the receiver complies with the limitations for class B digital equipment in Part 15 of FCC regulation. The product generates, applies and emits radio waves. It might cause harmful interferences to wireless communication if not be installed and used following the description of the manual. The product may cause interference in residential area, and the customer should take remedies to eliminate the interference at their own costs. If the product causes any harmful interference to wireless equipment or disturbs the receiving of TV signals (it can be identified by turning on and off the product), you can solve the trouble by following methods:

(1) Re-adjust the product or put it in another place;

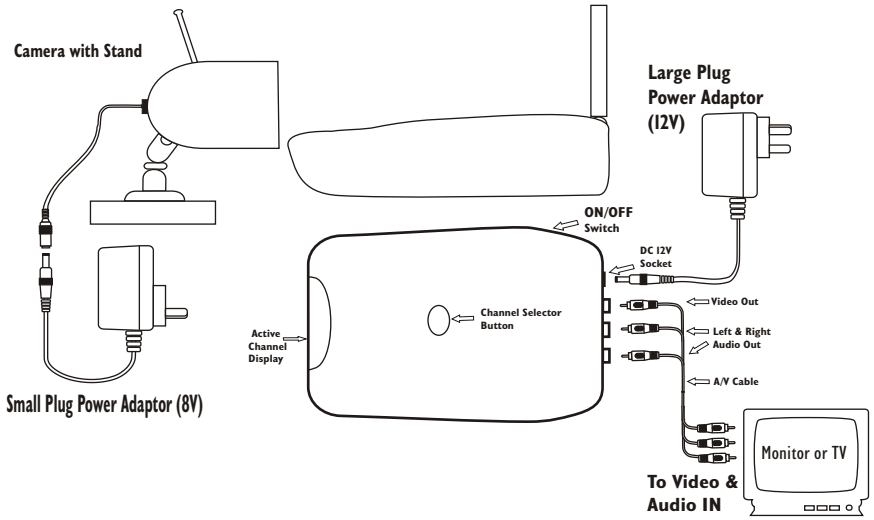
(2) Extend the distance between the equipment interfered and the product; and

(3) Refer to dealers or experienced radio electrician for help.

CE Notice

This product complies with standards including **L**ow **V**oltage **D**evice Directive 73/23/EEC; **EMC** Directive 89/336/EEC and **R&TTE** Directive 1999/5/EC. It passed the subject tests by the authority concerned and is authorized to bear **CE** mark.

Setting Up Your System



The Camera features an omni-directional antenna which is most effective when used in the UPRIGHT position.

1) Connect both the Camera and the Receiver to their respective power adaptors.

IMPORTANT: The camera requires an 8- 9V power supply, the receiver uses a 12V power supply.

2) Connect the Receiver to the equipment you wish to view the camera on (monitor, AV TV, VCR, DVR etc) using the supplied RCA-RCA cable and then turn the receiver ON via the switch on the left.

3) Direct the antenna of the receiver toward the antenna of the Camera. The antenna can be swivelled to face in the appropriate direction to a maximum of 180° (90° either side of centre). Once the antenna is correctly positioned, check the image for clarity and make minor adjustments to obtain the best picture. In some cases to obtain the best picture you will also need to adjust the position of the Camera and Receiver to suit your particular situation. Try slightly different locations for either unit to achieve optimal results.

4) If you are mounting the camera to a ceiling or eave, unscrew the camera stand from the camera body and carefully screw it into position on the top side of the camera using the two holes that are provided or the picture will appear on your screen upside down.

How to lock the receiver to the current channel.

1) Press the button on the remote control to lock/unlock the receiver to the current channel.

How to cycle through multiple channels.

2) Press the button on the remote control to initiate looping mode ("L" should display on the front of the receiver). Then press the channel number of the camera you wish to view (the channel number should display on the front of the receiver). To complete looping mode, press the button again to finish.

"D" on the receiver denotes disable and locks out the other buttons on the remote control.

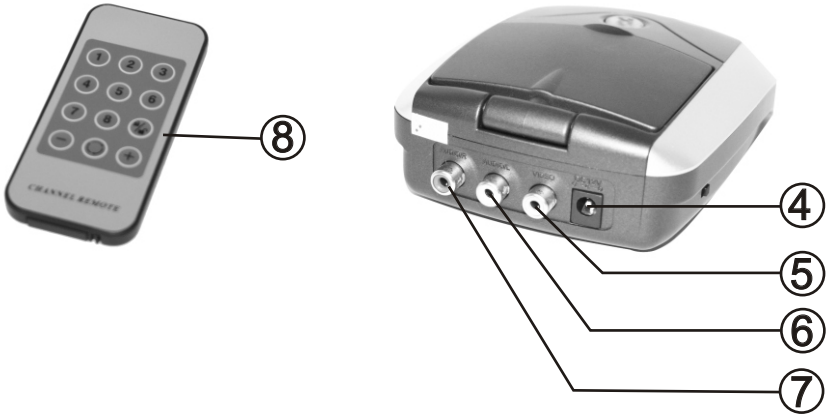
"E" on the receiver denotes enable and allows you to use the buttons on the remote control.

Camera Features

1. Omni-directional Antenna
2. Infra-red LEDs
3. Detachable Camera Stand
4. Microphone (enclosed in socket)
5. Power Cable & DC Power Socket

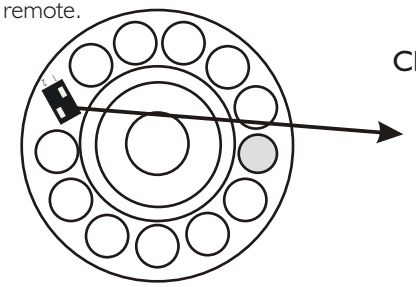
Receiver Features

1. Directional Antenna
2. Channel Selector Button
3. IR Remote Receiver window and Channel Display.
4. DC Power jack
5. Video Out jack
6. Audio Out (L) jack
7. Audio Out (R) jack
8. IR Remote Control
9. ON/OFF Switch



Changing The Channel On The Night Hawk Camera

The Night Hawk Cameras can be switched to any of four frequencies to assist in avoiding interference. Please see the illustration below for frequency settings. Unscrew the front of the camera case to gain access to the channel switch. To change the frequency/channel on the receiver, press the button on top of the receiver to cycle through the channels. You can also press the ⟳ button on the remote.



Front view of Switch Block (note the numbers 1 & 2 indicate the left side of the switch)

Channel & Frequency settings

Channel 1
Both switches Right
2414MHz

Channel 2
Top Left & Bottom Right
2432MHz

Channel 3
Top Right & Bottom Left
2450MHz

Channel 4
Both switches Left
2468MHz

By changing these switch settings, the frequency that the Camera transmits on changes. Once you have set the channel on the Camera, select the same channel on the receiver. If you experience interference try a different channel.
Do not set any of the cameras to the same channel or they will interfere with each others signal.

Important Information About This Product

- DUE TO GOVERNMENT REGULATIONS RELATING TO THE USE OF COVERT LISTENING DEVICES IN SOME COUNTRIES, YOU SHOULD CONSULT YOUR LOCAL COUNTRY, STATE, COUNTY OR TERRITORY REGULATIONS FOR RESTRICTIONS OR CONDITIONS OF THE USE OF SECURITY CAMERAS WITH AUDIO CAPABILITIES
- Best Results are achieved where there is a clear “line of sight” between the Camera/Transmitter and Receiver.
- Interference from certain electronic equipment or the moving human body can also affect the range obtainable.
- Please test all devices before final installation because transmission quality can often be improved by moving the components slightly.
- To avoid the risk of damage to Night Hawk Camera Pack, use only the supplied power adaptors.
- Beware of humid locations. Water droplets or spray may damage the receiver unit. If condensation does occur, do not use the equipment until it has dried out.
- Do not cut the DC power cable of the Night Watch Camera to fit with another power source. This may result in damage to the Night Watch Camera & any unauthorised modifications will void your warranty.